Drug	Conc.	Dose	Calculations	Route of admin.	Withdrawal time	Contraindications
2% Xylazine  XYLAZIN 2%  Oriposition:  Dosapa sira  William (X/D) orig  Milliam (X/D)	20 mg/ml	0.05mg/kg	$Volume \\ = \frac{0.05 * 8.4}{20} \\ = 0.021ml$	IM	14 days meat 48 hrs milk	-Do not use in animals receiving epinephrine or having active ventricular arrhythmias -Do not use in the last trimester of cattle pregnancy -Do not give to ruminants that are debilitated, dehydrated or have a urinary obstruction
10% Ketamine  ETAMIN 10%  Procincia de la constanti de la cons	100mg/ml	5mg/kg	$Volume = \frac{5*8.4}{100} = 0.42ml$	IM	3 days meat and milk	-Not for use in animals with prior hypersensitivity reactions, hypertension, severe cardiac, hepatic or regional impairment, head trauma, seizure disorders, glaucoma or head injuries

Drug	Conc.	Dose	Calculations	Route Of Admin.	Withdrawal time	Contraindications
2% Lidocaine (local anesthetic)	20 mg/ml	1ml per 10kgs	$\frac{1}{2} \text{ toxic dose}$ $= \frac{5*8.4}{20} = 2.1 ml$ Volume administered $= (1/10) * 8.4$ $= 0.84 \text{ ml}$	Epidural	1 day meat and milk	Not for use in animals with prior hypersensitivity reactions
Flunixin meglumine (post-op analgesic)	50 mg/ml	1.1mg/kg	$Volume \\ = \frac{1.1 * 8.4}{50} \\ = 0.18  ml$	IV	4 days meat, 36 hours milk	Do not use in animals who have shown prior hypersensitivity reactions

Drug	Conc.	Dose	Calculations	Route Of Admin.	Withdrawal time	Contraindications
Penicillin-streptomycin (antibiotics)  Combikel 40 L.A.	200,000 IU/ml	20,000 IU/kg	$Volume = \frac{20,000 * 8.4}{200,000} = 0.84ml$	IM	30 days meat, 10 days milk	-Do not use in animals hypersensitive to it, nor those with renal insufficiency
Epinephrine (for anaphylactic reactions)	1mg/ml	0.02mg/kg	$Volume \\ = \frac{0.02 * 8.4}{1} \\ = 0.17ml$	IV	-	Not for use in animals with narrow angle glaucoma, hypersensitivity to epinephrine, shock due to non-anaphylactoid causes, general anesthesia with halogenated hydrocarbons, during labour, dilated cardiomyopathy or coronary insufficiency
Tolazoline (Xylazine reversal)	100 mg/ml	4 times xylazine dose =0.2mg/kg	$Volume = \frac{0.2 * 8.4}{100} = 0.02 ml$	IV	-	-Do not use in animals hypersensitive to it
Atropine (for bradycardia < 30 bpm)	0.54 mg/ml	0.04 mg/kg	$Volume = \frac{0.04 * 8.4}{0.54} = 0.62ml$	IV	14 days meat, 3 days milk	-Do not use in animals with narrow angle glaucoma, tachycardia, ileus, urinary obstruction

Drug	Conc.	Dose	Calculations	Route Of Admin.	Withdrawal time	Contraindications
Tetanus anti-toxin  Tetanus anti-toxin  Equine Origin  an aid in the prevention in information i	1500IU in 5 ml	1ml	-	IM	-	Do not use in patients who previously displayed hypersensitivity reactions

*Ketamine and Xylazine were used in conjunction to induce general anesthesia
*Lidocaine was used to perform an epidural block on the kid, so that the region of the incision would be desensitized.
*Banamine and Combikel were administered for post-op purposes. Combikel would help reduce bacterial contamination, and Banamine has an analgesic effect that would act up to 24 hours, long after the lidocaine effects have worn off.
*All drugs in red indicate emergency drugs, and they should all be administered IV.
*Tetanus anti-toxin was administered because small ruminants are particularly susceptible to tetanus.